<u>REMARKS</u>

This amendment is being filed in response to the Office Action having a mailing date of July 18, 2008. Various claims are amended as shown. No new matter has been added. With this amendment, claims 1-19 are pending in the application.

I.   <u>Preliminary comments</u>

It is noted herein for the attention of the Examiner that responsibility for the prosecution of the present application has been transferred to new counsel (Dennis M. de Guzman and the other registered attorneys at the law firm of Seed IP Law Group PLLC). Accordingly, the present amendment and accompanying papers are being filed in accordance with 37 CFR 1.34. New power of attorney and change of correspondence address documents will be filed in due course. The new attorney docket number for the present application is 853663.434USPC.

It would be appreciated if the Examiner can telephone Mr. de Guzman in advance of the mailing of the next communication to inform Mr. de Guzman of the upcoming mailing, so that Mr. de Guzman can monitor for receipt of said next communication in the mail and/or check the U.S. Patent Office PAIR system for said next communication. It is hoped that this advanced notification provided by the Examiner can assist Mr. de Guzman in timely docketing and responding to said next communication, in the event that the new power of attorney and change of correspondence address documents have not yet been entered by the U.S. Patent Office at the time of mailing of said next communication.

The Examiner's cooperation and assistance with regards to the above would be very much appreciated.

II.   <u>Information disclosure statement (IDS) and amendments to the specification</u>

An IDS, copies of the non-U.S. patent documents listed therein, and the appropriate IDS fee are being submitted herewith. It is kindly requested that an

Examiner-initialed copy of this IDS be provided along with the next communication, so as to confirm that the references listed therein have been entered into the record and considered.

The specification is amended as shown to update the priority information and to add headings.

III.   Discussion of the claims and cited references

The present Office Action rejected claims 1-3 and 6-7 under 35 U.S.C. § 103(a) as being unpatentable over Szymanski (U.S. Patent No. 6,851,086) in view of Alapuranen (U.S. Patent Application Publication No. 2004/0010736).

Claims 10 and 15-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Diepstraten (U.S. Patent No. 5,339,316) in view of Alapuranen.

Claims 18-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Diepstraten, Alapuranen, in view of Gu (U.S. Patent No. 6,845,089).

Claims 11-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Diepstraten, Alapuranen, in view of Szymanski.

Claims 4-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Szymanski, Alapuranen, in view of Gu.

Claims 8-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Szymanski, Alapuranen, in view of Diepstraten.

For the reasons set forth below, these rejections are respectfully traversed. It is therefore kindly requested that the rejections be reconsidered and withdrawn.

A.   Independent claim 1

Independent claim 1 as presented herein recites, *inter alia*, "storing, by the at least one repeater node, a copy of the forwarded data packet" and "the at least one repeater node initiating retransmission of the data packet by transmitting the stored copy of the forwarded data packet to the receiver." It is respectfully submitted that these limitations are not met by the Szymanski and Alapuranen references relied upon by the present Office Action to reject claim 1.

For example, page 3 (section 3) of the present Office Action admitted that Szymanski "does not teach … storing, by the at least one repeater node, a copy of the forwarded data packet and … the at least one repeater node initiating retransmission of the data packet by transmitting the stored copy of the forwarded data packet." To supply these missing teachings of Szymanski, the present Office Action relies upon Alapuranen.

Specifically, page 3 (section 3) of the present Office Action alleges that paragraphs [0022], [0025], [0030], and [0038] of Alapuranen teach storing a copy of a forwarded data packet and transmitting the stored copy of the forwarded data packet. Further, page 6 (section 3) of the present Office Action relies upon paragraph [0032] of Alapuranen as allegedly disclosing "a pending packet buffer for storing copies of the forwarded data packets." These allegations by the present Office Action are respectfully traversed herein.

The paragraphs of Alapuranen relied upon by the present Office Action do not teach storing a copy of the forwarded packet and transmission of the stored copy. Paragraph [0022] of Alapuranen merely discusses the arrangement of his nodes 102, 106, and 107. Paragraph [0025] of Alapuranen merely discusses the nodes 102, 106, and 107 performing Internet Protocol (IP), Address Resolution Protocol (ARP), and other protocols. Paragraph [0030] of Alapuranen merely discusses the segmentation of a packet, sending of an ACK signal, and sending of a NACK signal. Paragraph [0038] of Alapuranen also merely discusses transmission and reception of a packet, including ACK and NACK signals. The present Office Action has not identified any specific teachings in these paragraphs [0022], [0025], [0030], and [0038] of Alapuranen that allegedly meet the limitations of claim 1 that pertain to storing a copy of the forwarded data packet and retransmission by transmitting the stored copy of the forwarded data packet—indeed, it is respectfully submitted herein that the present Office Action did not identify any such teachings in these paragraphs [0022], [0025], [0030], and [0038] of Alapuranen because there are no such teachings present therein.

Paragraph [0032] of Alapuranen, which has also been cited by the present Office Action, is reproduced below (emphasis ours):

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"[0032] During the retransmission of failed or erroneous segments, segments that are transmitted correctly are not retransmitted. Erroneous segments however, are retransmitted multiple times per MAC transaction. Any failed segments can be retransmitted in their original locations or in other locations that did not fail and did not require retransmission. This reduces the maximum time to successfully deliver MPDU but reduces the throughput compared to a sliding window method or some other methods. For example, when a MPDU of 1500 bytes is segmented to ten 150 byte segments, which are packed to one physical frame and are transmitted using a typical ARQ method, the actual bandwidth taken from the system contains overhead which may be up to 10-50% of the packet transmission time. For very short packets this may be a high number, for example 80%. If the example has a 30% segment error rate, then 30% of the segments transmitted through the link are lost due to marginal link and fading. Therefore, after the first transmission of 10 segments, 3 segments are incorrectly received and need to be retransmitted. In many situations these segments have to be retransmitted in a packet that contains only these 3 segments because there is no more data in transmit buffers. When these 3 segments are retransmitted through a 30% link, 1 segment is still incorrect after the first retransmission and has to be retransmitted. In a case where fixed overhead is high and wherein such overhead is independent of physical frame length, it is more economical to retransmit all the erroneous segments twice."

As evident from the above-quoted passage of Alapuranen, incorrectly received segments (3 incorrectly received segments in Alapuranen's example) have to be retransmitted. However, Alapuranen teaches that a packet has to be specifically created that "contains only these 3 segments" because "there is no more data in transmit buffers." The fact that Alapuranen needs to create a packet to separately transmit the 3 segments "because there is no more data in

transmit buffers" is an explicit teaching that he does not store copies of the (previously) forwarded data packet. Stated in another way, the "there is no more data in transmit buffers" teaching in Alapuranen explicitly means that Alapuranen does not meet the limitations of claim 1 that require storing a copy of the forwarded data packet and transmitting the stored copy of the forwarded data packet.

In view of the above, it is therefore respectfully submitted that claim 1 is allowable over Szymanski and Alapuranen.

B.   Independent claims 10 and 15

Independent claim 10 as presented herewith recites, *inter alia*, "a pending packet buffer to store copies of the forwarded data packets" and "retransmission ... by transmitting the stored copies of these data packets." Independent claim 15 as presented herewith recites similar limitations. It is respectfully submitted that claims 10 and 15 are allowable over the references relied upon by the present Office Action for rejection.

For example, page 6 (section 3) of the present Office Action admitted that Diepstraten does not teach the claimed pending packet buffer and retransmission by transmitting the stored copies.

To supply the missing teachings of Diepstraten, the present Office Action again relies upon Alapuranen. However, it is respectfully submitted that Alapuranen does not cure the deficiencies of Diepstraten.

More specifically, the present Office Action relies upon paragraph [0032] of Alapuranen as allegedly teaching the claimed pending packet buffer and retransmission by transmitting the stored copies. However and as previously explained above, paragraph [0032] of Alapuranen teaches that "there is no more data in transmit buffers." This teaching of Alapuranen therefore makes it abundantly clear that Alapuranen does not meet the limitations of claims 10 and 15 that require the pending packet buffer to store "copies of the forwarded packets" and that further require a retransmission module to initiate retransmission by transmitting "the stored copies of these data packets."

In view of the above, it is therefore respectfully submitted that claims 10 and 15 are allowable.

C. Other claim amendments

Various other amendments are made to the claims as shown to provide appropriate antecedent basis, to make the language within and between related claims consistent, to more precisely recite the subject matter contained therein, to remove extraneous/unnecessary limitations, to make grammatical/typographical changes, and/or to otherwise place such claims in better form.

Moreover, claims 1-3, 6-8, 10-12, and 14-17 are amended to clarify that certain recitations contained therein and in their related claims do not fall within the scope of 35 U.S.C. § 112, sixth paragraph.

IV. Conclusion

Overall, none of the references singly or in any motivated combination disclose, teach, or suggest what is recited in the independent claims. Thus, given the above amendments and accompanying remarks, the independent claims are now in condition for allowance. The dependent claims that depend directly or indirectly on these independent claims are likewise allowable based on at least the same reasons and based on the recitations contained in each dependent claim.

If the undersigned attorney (Dennis M. de Guzman) has overlooked a teaching in any of the cited references that is relevant to the allowability of the claims, the Examiner is requested to specifically point out where such teaching may be found. Further, if there are any informalities or questions that can be addressed via telephone, the Examiner is encouraged to contact Mr. de Guzman at (206) 622-4900.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

All of the claims remaining in the application are believed to be allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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